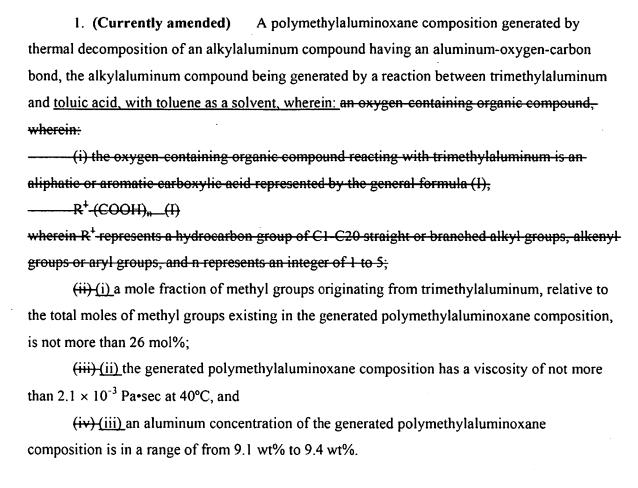
AMENDMENTS TO THE CLAIMS



2-3. (Cancelled)

4. (Withdrawn-Currently amended) A method of producing a polymethylaluminoxane composition having a mole fraction of methyl groups originating from trimethylaluminum, relative to the total moles of methyl groups of not more than 26 mol% and a viscosity of not more than 2.1×10^{-3} Pa•sec at 40° C, the method comprising the steps of:

causing trimethylaluminum to react with toluic acid, with toluene as a solvent; an oxygen-containing organic compound represented by the general formula (I),

$$-$$
R 1 -(COOH) $_{n}$ -(I)

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wherein R¹ represents a hydrocarbon group of C1-C20 straight or branched alkyl groups, alkenyl groups or aryl groups, and n represents an integer of 1 to 5, to form an alkylaluminum compound having an aluminum-oxygen-earbon bond; and

thermally decomposing the alkylaluminum compound,

wherein a ratio between a mole number of trimethylaluminum and a mole number of oxygen in the oxygen-containing compound represented by the general formula (I) is in the range of 1.25 to 1.40: 1.

5. (Withdrawn) The method of producing a polymethylaluminoxane composition according to claim 4, wherein

the thermal decomposition is conducted in the absence of a Lewis acid compound in production of the polymethylaluminoxane composition.

6-7. (Cancelled)

8. (Withdrawn) A polymerization catalyst for olefins, comprising as catalytic components:

a transition metal compound represented by the general formula (II),

$$MR^5R^6R^7R^8$$
 (II)

wherein M represents a transition metal element, and R⁵, R⁶, R⁷, and R⁸ represent organic groups that form together a cycloalkadienyl backbone, such as an alkyl group, an alkoxy group, an aryloxy group, an alkylsilyl group, an alkylamide group, an alkylamino group, an alkylimino group, or a halogen atom; and

the polymethylaluminoxane composition according to claim 1.

9. (Withdrawn) A method of polymerizing olefins using the polymerization catalyst according to claim 8.

10-15. (Cancelled)